UK Patent Application (19) GB (11) 2 211 340(13) A

(43) Date of A publication 28.06.1989

- (21) Application No 8813435.8
- (22) Date of filing 07.06.1988
- (30) Priority data (31) 8724349
- (32) 16.10.1987
- (33) GB

(71) Applicant

Autosigns Limited

(Incorporated in the United Kingdom)

North Mills, Frog Island, Leicester, LE3 5DM, United Kingdom

- (72) Inventor
 - Ian Lionel Johnson
- (74) Agent and/or Address for Service EN Lewis & Taylor

144 New Walk, Leicester, LE1 7JA, United Kingdom

- (51) INT CL4 G09F 7/02
- (52) UK CL (Edition J) G5C CBL
- (56) Documents cited

GB 0951870 A GB 0490440 A

GB 0738701 A GB 0628596 A

GB 0323145 A

(58) Field of search

UK CL (Edition J) G5C CBG CBL CBM CEQ INT CL. G09F

(54) Display sign

(57) A display sign on which numerals, letters or other characters are to be changed comprises a backing board 1 on which non-changeable information is permanently displayed; a hook-shaped extension 2 from the upper edge of the board to enable the sign to be suspended, and changeable flexible cards 4 on which one or more characters are displayed. Each card 4 has a tab (5) extending from each of a pair of opposed edges thereof and the backing board 1 has rows of spaced apertures 3 therein. The apertures 3 are spaced apart in pairs to receive the tabs of the cards 4, thereby to hold the cards in the required display positions and from which the cards can readily be removed. The board may be stiffened by an integral rearwardly-extending flange 6. The sign is particularly suitable for displaying, for example, the price of a motor vehicle by suspending the sign from the sun visor behind the windscreen of the vehicle.

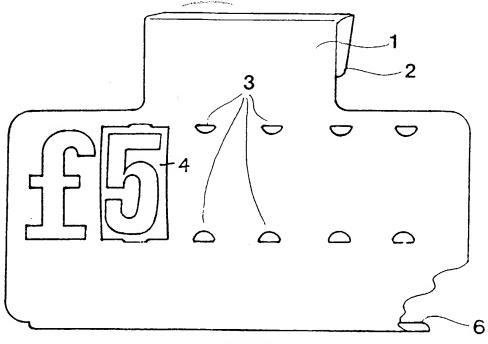


FIG.1

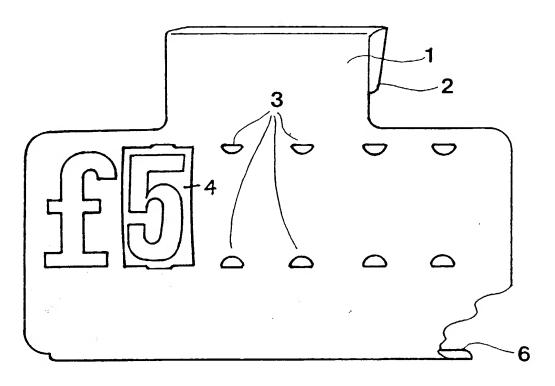
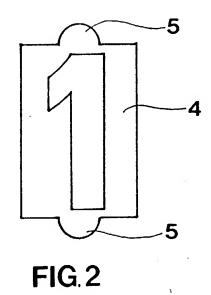


FIG.1



DISPLAY SIGN

5

10

15

20

25

30

The invention relates to a display sign and is particularly concerned with a display sign on which numerals, letters or other characters (hereinafter referred to as "characters") are required to display variable information and which therefore are required to be capable of being changed.

One example of such display sign is a price indicator to be placed on or adjacent a windscreen of a motor vehicle. This type of price indicator may have permanent information; for example, the name of the garage or dealer or make of vehicle and a pound sign or symbol denoting another unit of currency, followed by several digits which would have to be changed whenever the price of the vehicle is changed. Hitherto the price displayed has been indicated by digits printed on firm or other thin sheet which self-adheres to a backing sheet by peeling off a digit and replacing it by another digit. In time, after frequent use, the digit films become dirty or torn or lose their self-adhesive property.

An object of the invention is to provide a display sign having changeable characters of a more durable kind.

According to the invention, a display sign comprises a rigid or substantially rigid backing board on which any non-changeable information is permanently displayed; means by which the backing board is to be mounted in a display position, and a plurality of changeable flexible cards on each of which one or more characters are displayed, each card having a tab extending from each of a pair of opposed edges thereof and the backing board having a plurality of pairs of spaced apertures therein, the apertures of a pair being spaced apart by a distance substantially equal to the distance between said two opposed edges of a card, whereby the tabs of the card are insertable in respective corresponding apertures in the backing board thereby to hold the card in the required display

position, the card being temporarily flexed to enable the tabs thereof to be inserted into or removed from the respective apertures.

Conveniently there is a plurality of apertures so positioned in the backing board that corresponding apertures of each pair are aligned in a pair of parallel rows, whereby a plurality of cards can be aligned side-by-side by inserting the respective tabs of each of the cards in to corresponding apertures in the parallel rows.

Each tab may be of semi-circular shape of which the diameter is substantially concurrent with the adjacent edge of the card, each aperture also being of substantially semi-circular shape but inverted with respect to the corresponding tab, whereby when a tab has been inserted into a respective aperture, the adjacent edge of the card is substantially concurrent with or is parallel to the diameter of the aperture.

10

15

20

25

30

A known type of display sign for use in a motor vehicle has a hook-shaped extension on its upper edge which can be hooked over the upper edge of a sun visor when the latter is in its down position so that the display sign is suspended in front of the sun visor and is visible through the windscreen of the vehicle. The display sign provided by this invention may therefore similarly have a hook-shaped extension from the upper edge of the backing board whereby the backing board can be suspended from a fixed support, such as the upper edge of a sun visor which has been swung into its down position.

The backing board may have an integral rearwardly-extending flange on an edge or edge portion thereof to provide stiffening of the backing board. Conveniently, the integral rearwardly-extending flange is at the lower edge of the backing board, that is the edge thereof remote from the upper edge having the hook-shaped extension therefrom.

The cards may be made from a flexible plastics sheet; for example from a flexible polyvinylchloride sheet. Alternatively the cards

may be made from a flexible cardboard sheet.

5

· 15

20

25

30

The cards and their integral tabs may be stamped by partial cutting around their edges on a flexible sheet, whereby the cards and their integral tabs can readily be separated from the remainder of the sheet before their first use.

By way of example, a price display sign for hanging on a sun visor of a motor vehicle, whereby the price will be visible through the windscreen of the vehicle will now be described with reference to the accompanying drawing, in which:-

Figure 1 is a view of the sign from the front and one end, with a corner broken away, and

Figure 2 is a front view of a removable flexible card to be fitted to the sign.

The sign consists of a backing board 1 cut from a rigid polyvinylchloride sheet. The backing board is rectangular in shape and larger in area than the sun visor and has an integral extension in the plane of the sheet from the upper edge. The extension is bent rearwardly and downwardly to form a hook portion 2 of flat rectangular inverted cross-section to enable the backing board to be hung on the upper edge of the sun visor when the latter is in its down position, the backing board being positioned in front of and covering the visor. The front face of the sign is printed with or otherwise carries permanent information to be displayed. For example, the make of vehicle or name of the dealer and a pound sign or other currency symbol. Alongside the pound sign, or other currency symbol, there is a plurality of apertures 3 spaced apart in two parallel rows one above the other. The apertures are of semi-circular shape having their diameters spaced apart in the two lines, the upper apertures being directed downward and the lower apertures being directed upward. The number of pairs of upper and lower apertures is the same as the maximum number of digits in the price to be displayed. For example, there may be five digits to be displaced and therefore there would be five pairs of apertures, as shown.

5

10

15

20

25

30

Each digit is printed or otherwise carried on a rectangular flexible card 4. For example a piece of polyvinylchloride sheet thinner than the backing board. Each card has a pair of opposed semi-circular tabs 5 extending from its upper and lower edges. The tabs 5 face in the opposite direction to the corresponding apertures and have their diameters concurrent with the upper and lower edges of the card. The distance between the upper and lower edges of the cards is substantially equal to the distance between the diameters of the apertures. As the cards are flexible they may be slightly flexed to enable the tabs to be inserted into the corresponding apertures. The resilience of the cards will hold the diameters of the tabs in substantial alignment with or parallel to the diameters of the apertures. Thus when a plurality of digit cards are mounted with their tabs in the corresponding apertures side-by-side, the desired price will be displayed and the digits will be seen correctly aligned in a row parallel to the rows of apertures. When the displayed price is to be changed one or more digits may readily be removed by temporary flexing and then replaced by another appropriate digit. As the cards are made of flexible sheet they have a greater durability than the films used hitherto. By using a PVC sheet the cards and the backing board can easily be maintained clean by wiping with a damp cloth. Blank cards or cards printed with dots or dashes may be used instead of cards bearing digits, where applicable. All the cards are identical in size and have the same arrangement of tabs to enable interchangeability to be achieved.

The cards 4 and their integral tabs 5 may be stamped by partial cutting around their edges on a flexible sheet, whereby the cards and their integral tabs can readily be separated from the remainder of the sheet before their first use.

To provide stiffening of the backing board to restrain it from flexing, for example, under the influence of sunlight, an edge or edge portion of the backing board may have an integral rearwardly-extending flange. For example, as shown in Figure 1, where a lower

corner of the front of the board has been broken away, for illustration, the lower edge, that is the edge remote from the hook-shaped extension 2, has an integral rearwardly-extending flange 6.

Although the preferred embodiment of the backing board has the integral hanger, the backing board may be supported by other means.

As will be observed from Fig. 1, when a card has been inserted onto the backing board, the card projects slightly from the plane of the board so providing an overall three dimensional effect to the display sign.

CLAIMS

25

- A display sign on which numerals, letters or other 1. characters (herein referred to as "characters") are required to display variable information and which therefore are required to be capable of being changed, the display sign 5 comprising a rigid or substantially rigid backing board on which any non-changeable information is permanently displayed; means by which the backing board is to be mounted in a display position, and a plurality of changeable flexible cards on each of which one or more characters are 10 displayed, each card having a tab extending from each of a pair of opposed edges thereof and the backing board having a plurality of pairs of spaced apertures therein, the apertures of a pair being spaced apart by a distance substantially equal to the distance between said two opposed edges of a card, whereby the tabs of the card are 15 insertable in respective corresponding apertures in the backing board thereby to hold the card in the required display position, the card being temporarily flexed to enable the tabs thereof to be inserted into or removed from the respective apertures. 20
 - 2. A display sign as claimed in Claim 1 in which a plurality of pairs of apertures are so positioned in the backing board that corresponding apertures of each pair are aligned in a pair of parallel rows, whereby a plurality of cards can be aligned side-by-side by inserting the respective tabs of each of the cards into corresponding apertures in the parallel rows.
- 3. A display sign as claimed in any preceding claim in which each tab is of substantially semi-circular shape of which the diameter is substantially concurrent with the adjacent edge of the card and each aperture is also of substantially semi-circular shape but inverted with respect to the corresponding tab, whereby when a tab has been inserted into a respective aperture, the adjacent edge of the card is

substantially concurrent with or is parallel to the diameter of the aperture.

- 4. A display sign as claimed in any preceding claim in which the mounting means comprises a hook-shaped extension from the upper edge of the backing board, whereby the backing board is arranged to be suspended from a support to be engaged by the hook-shaped extension.
- A display sign as claimed in any preceding claim in which an edge or edge portion of the backing board has an integral rearwardly-extending flange to provide stiffening of the backing board.
- 6. A display sign as claimed in Claim 4 in which the lower edge of the backing board, that is the edge remote from the upper edge having the hook-shaped extension, has an integral rearwardly-extending flange to provide stiffening of the backing board.
 - 7. A display sign as claimed in any preceding claim in which the backing board is made from a plastics material.
- 8. A display sign as claimed in Claim 7 in which the backing board is made from a rigid or substantially rigid polyvinylchloride sheet.
 - 9. A display sign as claimed in Claim 7 in which the backing board is made in moulded polystyrene.
- 10. A display sign as claimed in any preceding claim in which 25 the cards are made from a flexible plastics sheet.
 - 11. A display sign as claimed in Claim 9 in which the cards are made from a flexible polyvinylchloride sheet.

- 12. A display sign as claimed in any one of Claims 1-9 in which the cards are made from a flexible cardboard sheet.
- 13. A display sign as claimed in any one of Claims 10-12 in which the cards and their integral tabs are stamped by partial cutting around their edges on a flexible sheet, whereby the cards and their integral tabs can readily be separated from the remainder of the sheet before their first use.

5

14. A display sign constructed and arranged substantially as described herein and shown in the accompanying drawing.